



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

DRAFT

Denial of Change of Point of Diversion, Place of Use, and Purpose of Use
REPORT OF EXAMINATION
WRTS File No. CS2-26356

PRIORITY DATE	CLAIM NO.	PERMIT NO.	CERTIFICATE NO.
April 5, 1984			S2-26536

NAME		
Skamania County		
ADDRESS/STREET	CITY, STATE	ZIP CODE
PO Box 790	Stevenson, Washington	98648

PUBLIC WATERS TO BE APPROPRIATED

SOURCE
One Existing Well (USFS Well - Well Tag No. AFB061) Two Proposed Wells (Trout Creek Field Well and Martha Creek Field Well)
TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND (cfs)	MAXIMUM GALLONS PER MINUTE (gpm)	MAXIMUM ACRE FEET PER YEAR (afy)
N/A	N/A	N/A

QUANTITY, TYPE OF USE, PERIOD OF USE
APPLICATION DENIED.

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION—WITHDRAWAL
USFS Well: 700 feet East and 50 feet North from the center of Section 27, T. 4 N., R. 7 E.W.M. Trout Creek Field Well: 685 feet West and 925 feet North from the center of Section 27, T. 4 N., R. 7 E.W.M. Martha Creek Field Well: 60 feet West and 732 feet South from the center of Section 27, T. 4 N., R. 7 E.W.M.

Change in the Point of Withdrawal is Denied.					
LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP	RANGE	WRIA	COUNTY
USFS Well: SW¼ NE¼ Trout Creek Field Well: SE ¼ NW ¼ Martha Creek Field Well: NE ¼ SW ¼	27	4N	7 E.W.M.	29	Skamania
PARCEL NUMBERS	LATITUDE		LONGITUDE		DATUM
04072700180000 04072700190000 04072700200000	USFS Well: 45.8016855°N Trout Creek Field Well: 45.804236979°N Martha Creek Field Well: 45.7997381°N		USFS Well: 121.930338°W Trout Creek Field Well: 121.935171177°W Martha Creek Field Well: 121.9327220°N		NAD83
DENIED					

RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
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LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED
[Attachment 1 shows location of the authorized place of use and point(s) of diversion or withdrawal]

Township 4 N., Range 7 E.W.M. - Section 22, lot 2; Section 27, lots 2, 4, 6, 9, 12, 13, and 16, NE ¼ SE ¼ SE ¼, SE ¼ SE ¼ SE ¼, and NW ¼ SE ¼ SE ¼; Section 34, lot 2.
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Change in the Place of Use is Denied.

DESCRIPTION OF PROPOSED WORKS

N/A

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	WATER PUT TO FULL USE BY THIS DATE
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N/A	N/A	N/A
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FINDINGS OF FACT AND ORDER

Upon reviewing the investigator’s report, I find all facts relevant and material to the subject application have been thoroughly investigated. Furthermore, I find this change of water right as requested shall be denied, in accordance with RCW 90.03.380 and RCW 90.44.100.

Therefore, I ORDER the requested Change Application No. CS2-26536 be **DENIED**.

You have a right to appeal this ORDER. To appeal this you must:

- File your appeal with the Pollution Control Hearings Board within 30 days of the “date of receipt” of this document. Filing means actual receipt by the Board during regular office hours
- Serve your appeal on the Department of Ecology within 30 days of the “date of receipt” of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). “Date of receipt” is defined at RCW 43.21B.001 (2).

Be sure to do the following:

- Include a copy of this document that you are appealing with your *Notice of Appeal*.
- Serve and file your appeal in paper form; electronic copies are not accepted.

1. File your appeal with the Pollution Control Hearings Board

Mail appeal to:		Deliver your appeal in person to:
The Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903	OR	The Pollution Control Hearings Board 4224 – 6th Ave SE Rowe Six, Bldg 2 Lacey, WA 98503

2. Serve your appeal to the Department of Ecology

Mail appeal to:		Deliver your appeal in person to:
The Department of Ecology Appeals Coordinator PO Box 47608 Olympia, WA 98504-7608	OR	The Department of Ecology Appeals Coordinator 300 Desmond Dr SE Lacey, WA 98503

3. Send a copy of your appeal to:

Thomas Loranger
Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia WA 98504-7775

For additional information, visit the Environmental Hearings Office Website: <http://www.eho.wa.gov> . To find laws and agency rules visit the Washington State Legislature Website: <http://www1.leg.wa.gov/CodeReviser> .

Signed at Olympia, Washington, this day of 2008.

Thomas Loranger, Section Manager
Water Resources Program
The Southwest Regional Office

BACKGROUND

Description and Purpose of Proposed Change

On April 23, 2004, Kris Kaufman, on behalf of Skamania County, submitted an *Application for Change* to move the point of diversion, change the place of use, and change the purpose of use of Water Right Certificate No. S2-26536. This application was assigned Control No. CS2-26536.

Certificate No. S2-26536 was issued to the United States Forest Service (USFS) on April 5, 1984. It authorizes diversion of 14.5 cubic feet per second (cfs) and 548 acre-feet per year (afy) from Trout Creek, tributary of the Wind River, for irrigation and frost control. Skamania County is proposing to change the point of diversion from Trout Creek to one existing well and two proposed wells; the purpose of use would change irrigation and frost control to multiple domestic, and the place of use would be modified to reflect those lands owned by Skamania County at the Wind River Nursery (WRN) site (Table 1).

Attributes of the Certificate and Proposed Change

Table 1. Summary of Proposed Changes to Water Right Certificate No. S2-26536

Attributes	Existing	Proposed
Name	United State Forest Service	Skamania County
Priority Date Date of Application for Change	April 5, 1984	April 23, 2004
Instantaneous Quantity	14.5 cfs	12.33 cfs*
Annual Quantity	228 afy (irrigation of 160 acres) <i>supplemental, non-additive</i> 320 afy (frost control of 160 acres) <i>130 afy primary, 190 afy non-additive</i>	466.1 afy **
Source	Trout Creek	Two Proposed Wells Existing USFS Well***
Point of Diversion or Withdrawal	T04N/R07E-27	T04N/R07E-27
Purpose of Use	Irrigation, Frost Control	Multiple Domestic
Period of Use	Irrigation – May 1 to October 1 Frost Control – Year-round, as needed	Year-round, as needed
Irrigated Acres	160	40
Place of Use	Portions of S½ SW¼ SW¼, SW¼ SE¼ SW¼ all in Sec. 22, and NW¼ SW¼ NE¼, S½ NE¼ NW¼, N½ NW¼ NW¼, SE¼ NW¼ NW¼, NE¼ SW¼ NW¼, N½ SE¼ NW¼, E½ E½ SW¼, W½ SE¼, SE¼ SE¼ all in Sec. 27, all in T. 4 N., R. 7 E.W.M., less roads and other facilitates.	S ½ SE ¼, NW ¼ SE ¼, SW ¼ NE ¼, E ½ SW ¼, and NW ¼ of Section 27, T. 4 N., R. 7 E.W.M.

Notes:

*12.33 cfs is the apportionment allocation as determined by Kris Kauffman of Water Rights Inc. in accordance with 85.05% to Skamania County as outlined in the 2002 Conveyance Deed (not an evaluation of the extent and validity of the certificate).
**466.1 afy is the apportionment allocation as determined by Kris Kauffman of Water Rights Inc. in accordance with 85.05% to Skamania County as outlined in the 2002 Conveyance Deed (not an evaluation of the extent and validity of the certificate).
***The four change applications proposed four new wells; however, the county has expressed an interest utilizing only two new wells and the existing USFS Well.

Legal Requirements for Proposed Change

The following is a list of requirements that must be met prior to authorizing the proposed changes in purpose of use, place of use, and point of diversion.

- **Public Notice**

A public notice of the proposed transfer was published in The Skamania County Pioneer, a daily newspaper in Stevenson, Washington, for a period of two consecutive weeks beginning on July 14th to the 21st in 2004. One letter of protest was received (see *Consideration of Protests and Comments* below).

- **State Environmental Policy Act (SEPA)**

The State Environmental Policy Act (SEPA) was enacted in 1971 under Chapter 43.21 RCW to ensure that projects are reviewed before approval of permits or variances for possible environmental consequences. An entity is not required to file an environmental determination checklist for SEPA review with a lead agency if the project meets certain categorical exemptions as defined in WAC 197-11-305 and WAC 197-11-800.

This water right change application is categorically exempt under WAC 197-11-800(4) from threshold determination requirements under SEPA for *water rights appropriations*. However, this proposal is a segment of a larger proposal that contains a series of actions physically or functionally related to each other, some are not categorically exempt, which requires all proposals under the project, including this water right change application, comply with threshold determination requirements as described under WAC 197-11—305(1)(b)(i).

In addition, this proposal is a segment of a larger proposal that contains a series of exempt actions physically or functionally related to each other, which together may have probable significant adverse environmental impact. Therefore, all proposals under the project, including this water right change application, have to comply with threshold determination requirements as described under WAC 197-11-305(1)(b)(ii).

Skamania County Published a Mitigated Determination of Non Significance on October 28, 2008. Following receipt of comments from the Department of Ecology dated November 10, 2008, the County issued a clarifying memo on November 20, 2008.

- **Water Resources Statute and Case Law**

A point of diversion for a surface water right may be changed to a groundwater point of withdrawal. The authority is derived from RCW 90.03.380, RCW 90.44.020-030, RCW 90.44.100, and RCW 90.54.020(9). RCW 90.03.380(1) states that a water right put to beneficial use may be changed if it does not result in detriment or injury to other water rights. Additionally, moving the point of diversion to a groundwater withdrawal requires compliance with the groundwater code, RCW 90.44; including a finding of no detriment to public welfare and that the source of the existing diversion and proposed point of withdrawal be part of the same water body.

The Washington Supreme Court has held that Ecology, when processing an application for change to a water right, is required to make a tentative determination of the extent and validity of the claim or right. This is necessary to establish whether the claim or right is eligible for change. *R.D. Merrill v. PCHB* and *Okanogan Wilderness League v. Town of Twisp*.

INVESTIGATION

History of Water Use

The Wind River Nursery (WRN) is located in the Gifford Pinchot National Forest, approximately 7 miles northwest of the city of Carson and 10 miles north of the Columbia River, along the Wind River drainage of the Wind/White Salmon Water Resource Inventory Area (WRIA) 29, within a large portion of Township 4 N., Range 7 E.W.M.

The WRN was established in 1909 by the United States Forest Service (USFS) to reforest areas of the region that had been severely damaged by fire. It is over 400 acres in size and contains 35 buildings. Water use at the WRN site was primarily for seedling production for reforestation. Water use was for the purposes of irrigation, frost protection, commercial processing, community domestic supply, and fire protection. Nursery operations continued for nearly a century and were discontinued at the end of the 1996 irrigation season. Water is still used for minimal domestic supply by the USFS (through the exercise of other water rights appurtenant to the site including G2-25679 and G2-26789) for a few year-round residents at the WRN, although the majority of the buildings are unoccupied.

Certificate No. S2-26536, subject of this change application, was issued for 14.5 cfs and 548 afy in the following quantities, purposes, and periods of use:

- ➡ 228 acre-feet per year* – Irrigation of 160 Acres – May 1 to October 1
* Supplemental non-additive to Water Right Certificates No.’s 764 and S2-00817.
- ➡ 320 acre-feet per year** – Frost Control for 160 Acres – As Needed
** 130 afy is allotted primary and 190 afy is allotted supplemental, non-additive to Certificate No. S2-00817.

According to the USFS, the WRN began the process of closing in 1995-1997 (E-mail message from Cynthia Henschell - USFS, June 2, 2005). By 1997, “virtually none of the area would be irrigated”, suggesting use of water for irrigation would have ceased by the end of the 1996 irrigation season.

In 1998, the United States Congress passed H.R. 2107 requiring the Secretary of Agriculture to convey the WRN to Skamania County in exchange for County lands. Skamania County’s Redevelopment Team selected The Portico Group in 1999 to produce a Redevelopment Plan for the WRN. The Wind River Nursery Site and Facility Plan (Portico Plan) was published on June 1, 2000.

On February 1, 2002, the County acquired approximately 187.51 acres of land (only 160 acres had previously been approved for irrigation), a portion of water rights appurtenant to the property, and 27 buildings at the WRN site through an official USDA Conveyance Deed. The Conveyance Deed apportioned 136.08 irrigated acres under Certificate No.’s S2-00817, S2-26356, and R2-23196 to Skamania County, while retaining 23.92 irrigated acres under Certificates No.’s S2-00817 and S2-26536 for the USFS. Apportionment shares for Certificate No. G2-25679 were separately defined in the Conveyance Deed¹.

In 2004, the County submitted four change applications to move the point of withdrawal, modify the place of use, and change the purpose of use for Certificate No.’s 764, S2-00817, G2-25679, and S2-26356. In the change applications, Mr. Kauffman interpreted the Conveyance Deed allocations of apportionment (Table 2).

Table 2. Wind River Nursery Water Right Certificate Apportionment

Certificate No.	Priority Date	Original Right Attributes		County Apportionment		USFS Apportionment	
		Qi	Qa	Qi	Qa	Qi	Qa
764* (Certificate of Change 637)	12/29/23	2 cfs	n/a	1.7 cfs (765 gpm)	40.8 afy	.3 cfs	n/a
S2-00817	1/19/72	8.25 cfs	418 afy	7.02 cfs (3159 gpm)	355 afy	1.23 cfs	63 afy
G2-25679	8/13/80	200 gpm	66.5 afy	101 gpm	33.6 afy	99 gpm	32.9 afy
S2-26536	4/5/84	14.5 cfs	548 afy	12.33 cfs (5549 gpm)	466.1 afy	2.17 cfs	81.9 afy

Source: Kaufmann (Wind River Nursery Project – Provisional Skamania County Summary Retention, 5/5/2004)

Notes:
*This table is not a determination of the extent and validity of the water rights.
**Certificate No. 764 is not referenced in the 2002 USDA Conveyance Deed, but defined in the 2004 change application.

¹ Apportionment allocations under Groundwater Right Certificate No. G2-25679 will be reviewed in-depth in the Report of Examination for Certificate No. G2-25679.

Currently, there is an active operation in the northern part of the property (Pacific Crest Field) where water is still used by the USFS for irrigation of 60 acres, domestic use, and frost protection under Certificate No. G2-26789. This certificate is still owned by the USFS and used for forest research by the Pacific Northwest Research Station, the Wind River Experimental Forest, the Canopy Crane Research Facility, and the University of Washington - College of Forest Resources. This certificate is not subject of apportionment to the County and will remain under the USFS ownership.

Determined Future Development Plan

RCW 90.14.140(2)(c) states that a water right not used for more than five years is not relinquished if it is claimed for a determined future development to take place within 15 years of the last beneficial use of water under the water right. In addition, a series of court cases provides additional guidance in assessing such a plan. In order to be valid, a determined future development plan must satisfy a series of tests as established in *R.D. Merrill Company v. Pollution Control Hearings Board*; *City of Union Gap and Ahtanum Ridge Business Park LLC v. Washington State Department of Ecology*; and *Protect Our Water v. Islanders for Responsible Water Management (Intervenors)*, *State of Washington, Department of Ecology, and King County Water District No. 19*:

- The project must be sufficiently complex as to require more than five years to complete;
- The plan must be determined and fixed within five years of the last beneficial use of the water;
- The party exercising the plan must have equity in the water right;
- The plan must remain fixed, and;
- Affirmative steps must be taken to implement the plan within 15 years.

Publication of the Wind River Nursery Site and Facility Plan (Portico Plan) by Skamania County on June 1, 2000 will serve as evidence of a “fixed and determined” plan for Water Right Certificate No.’s 764, S2-00817, S2-26536, and G2-25679 (referenced in the plan and subject of current change applications with Ecology). This plan was in place within five years of the first date of non-use of water on November 1, 1996 (presumably the end of irrigation at the WRN site). It is the mechanism by which relinquishment is prevented for all water rights described in the plan.

Initially, the Portico Plan reviews eleven possible uses for the WRN site, grouped into three alternative “Site Concept Plans”. These three alternatives were later refined to create the Wind River Development Plan (Portico Plan, P. 1-10).

- Village at Martha Creek: Located at Martha Creek Field. Proposed mix of pen space, re-use of existing buildings and new construction. Program elements include the Wind River Institute, Martha Creek Camp, Cascadia Learning Center, the Inn at Wind River, and the Cascade Event Grounds.
- Hemlock Business Campus: Located at eastern portion of Trout Creek Field and at existing processing center. Program elements will incorporate agriculture processing, office space, new business space, and public services in new and existing buildings.
- Wind River Fields: Program elements include Skamania Farms, an Equestrian center, the research outpost for the Wind River Institute, and the Forest Reserve buffer.

In general, the plan anticipates water demands will increase into the future as the site develops. The plan also forecasts “the 2005, 2010, and 2030 plans, domestic and irrigation water demands would each fall under a ‘Middle-Low’ Water Right Scenario” (Portico Plan, P. 3-28).

Ecology recognizes Figure 3-11 (a ‘Middle-Low’ Water Right Scenario), identified in the Portico Plan, as the “fixed and determined” plan for the WRN site (Portico Plan, P. 3-29). Several public meetings were held between 1999 and 2000, and local citizens provided input on the proposed ‘Site Concept Plans’ and future development at the WRN site. Figure 3-11 combines different facets of the “Site Concept Plans” and includes a timeline for completion on the project (Table 3).

Table 3. Determined Future Development Plan - Anticipated Water Needs

Year	Irrigation Water Demand	Domestic Needs	Acres Irrigated	Water Use Per Acre
2005*	27.5 afy	None identified	25	1.5 afy/acre
2010	75 afy	4.59 afy (1,496,000 gallons)	50	1.5 afy/acre
2030	75 afy	7.2 afy (2,348,776 gallons)	50	1.5 afy/acre
Total	82.2 afy**			

	- 15 afy (irrigation of 10 acres)
Revised Total	67.2 afy***

Source: These demand figures are referenced in Table 2-7 and Figure 3-11 of the Portico Plan.

Notes:
 *Predicted timeline in Portico Plan.
 **Figure 3-11 identifies 50 acres will be irrigated at the WRN site, although 10 of those acres are located at the Pacific Crest Field which was not conveyed to the County. Therefore, 10 acres cannot be included in total irrigable acreage calculations. Furthermore, the Pacific Crest Field is being used by the USFS for research and is appurtenant to Certificate G2-26789. Irrigable acreage at the WRN site is limited to 40 acres as consistent with the Portico Plan (10 acres at Martha Creek Field and 30 acres at Trout Creek Field). Assuming 1.5 afy per each of the 10 acres, the aggregate demand is reduced to 67.2 afy.
 ***This revised total does not include allocations for fire protection needs at 7 afy or updated domestic allocations in accordance with planning guidelines in the DOH Water System Design Manual (see *Future Domestic Use Requirements* section below).

Higher water demand scenarios as described in the appendix of the plan (Figure 9-3d) appear only as a feasibility study. These three alternatives or “Site Concept Plans” were eventually revised and do not represent a fixed development plan (Portico Plan, P. 5-40).

In October 2003 and October 2005, Kennedy-Jenks Consultants on behalf of the county provided additional analyses of water demand of 577 gallons per minute (gpm) and 511 afy for municipal supply². Their estimate of water use for domestic and irrigation purposes is significantly higher than identified in the Portico Plan (Figure 3-11). These water demand estimates fall outside the five-year period during which a future determined plan could be finalized, and will not be recognized by Ecology as a “fixed and determined” plan.

Future Domestic Use Requirements

Domestic water will be required at the WRN site as identified in the fixed development plan (Figure 3-11). Future domestic uses at the WRN site include Martha Creek Camp (cabin and resort), Wind River Inn (cabin and resort), Wind River Institute (housing), Cascadia Learning Center (school and cafeteria), Cascade Festival Grounds (dining hall), Wind River Fields (office), and the Hemlock Business Campus (office) (Attachment 2).

The annual quantity requested in the Portico Plan for future domestic water use at the WRN site is 2,348,776 gallons per year or 7.2 afy. This domestic quantity was evaluated in accordance with Environmental Protection Agency (EPA) planning guidelines for water supply systems (EPA 1974). EPA planning guidelines generally allot less water for supply systems than Washington State Department of Health (DOH) planning guidelines as identified in the Water System Design Manual (2001).

In accordance with guidelines in the DOH Water System Design Manual (2001), we will approve an annual quantity for future domestic water use at the WRN site of 2,652,400 gallons per year or 8.13 afy (Attachment 1). We will also approve an additional 10 percent of the annual quantity at .81 afy to account for possible water system efficiency losses (in accordance with the 2003 Municipal Water Supply – Efficiency Requirements Act). The total annual quantity approved for future domestic water use at the WRN site is 2,932,659 gallons per year or approximately 9 afy. Instantaneous withdrawals for domestic and fire protection needs at the site will be 577 gpm in accordance with calculations made by Kennedy-Jenks and Associates in 2003 and 2005 to allow for maximum peak demand (see footnote ³ for more information).

Fire Protection Requirements

Kennedy/Jenks Consultants, on behalf of Skamania County, estimated fire flow requirements for future development at the WRN site based on proposed building size and specifications in the Uniform Fire Code (Attachment 2). According to UFC specifications, the maximum amount of water needed for fire protection would

² Letters from Kennedy-Jenks Consultants base water demand upon the Washington State Department of Health (DOH) Water System Design Manual. DOH uses a peaking multiplier of 2.0 as a “conservative approach”. Kennedy-Jenks applied a more conservative peaking multiplier of 3.0 and assumed the WRN needs a water supply that can sustain a peaking flow 365 consecutive days per year.

For the purposes of allocating water rights, annual quantity (Qa) is based upon annualizing average daily demand, which includes the infrequent peaking event. Maximum daily demand or peak hour demand, if it cannot be met by withdrawing at a higher rate from the water supply, must be met through storage.

DOH guidance on peaking demand is applicable to meeting needs associated with residential units or their equivalents (ERUs) not those of agricultural irrigation; thus, it is not necessary to use a multiplier of 3.0 with respect to estimates of irrigated water demand. A peaking multiplier of 3.0 applied to a water duty of 4 afy per acre results in a water duty of 12 afy per acre – an unreasonable amount of water for this region.

be 4,750 gpm for 4 hours at a total of 1,140,000 gallons or 3.5 afy. The County requests the ability to fill a holding tank of 1.14 million gallons, twice a year, for fire protection requirements. An annual quantity of 7 afy will be approved to meet the County’s requested fire protection needs.

Future Irrigation Requirements

Medicinal botanical herbs, native trees or plants, and ornamental grasses were identified as potential crops for agricultural production at the WRN site. Many of these crops do not have specific irrigation requirements as covered in the Washington Irrigation Guide (WIG). Charles Brun, PhD., Horticultural Advisor at the WSU Extension Office in Clark County, stated it would be reasonable to assume an irrigation season beginning mid-June through the end of September at one-inch per week.

This would result in less than 18 inches/acre of irrigation water needed for the season. The crop irrigation requirement – water supplied by irrigation to satisfy evapotranspiration not provided by water stored in the soil or precipitation – would be 11.7 inches/acre. This estimation of irrigation water requirements for the WRN site is consistent with Figure 3-11 (recognized as the “fixed and determined” plan) of the Portico Plan. The Portico Plan identifies a need of 1.5 afy/acre for future agricultural operations at the site.

Water demand assumptions of 18 inches or 1.5 afy/acre will be used to calculate irrigation needs. Allocation of 1.5 afy/acre assumes 65 percent efficiency because the County will likely use the existing solid-set irrigation system once used by the USFS. Skamania County would like to irrigate 50 acres, as identified in the Portico Plan. However, the plan (drafted in June of 2000) proposed irrigation of 10 of the 50 acres within the Pacific Crest Field. In the 2002 USDA Conveyance Deed (apportionment document), irrigable land within the Pacific Crest Field was not conveyed to Skamania County.

The annual quantity required to irrigate an area of 40 acres will be 60 afy. Typical irrigation allocations for instantaneous needs fall between 0.01 to 0.02 cfs/acre. The irrigation system in-use at the WRN site is a solid-set sprinkler system and would normally require an instantaneous quantity of 0.02 cfs/acre or 9 gpm/acre. Skamania County intends to irrigate an area of land of 40 acres, so 360 gpm should be adequate for instantaneous purposes.

Extent and Validity of Certificate No. S2-26536

Certificate No. S2-26536 was issued with 548 afy of water for irritation and frost control of 160 acres. The portion allotted for irrigation, 228 afy, under this water right was entirely *supplemental, non-additive* to Certificate No.’s 764 and S2-00817. The portion allotted for frost control, 320 afy, under this water right was divided 130 afy for *primary* use and 190 afy *supplemental, non-additive* use.

On February 8, 2008, Cynthia Henschell, prior manager at the WRN site, provided Ecology with a series of maps outlining areas historically irrigated at the WRN during 1990, 1994, 1995, and 1996. Irrigation of all fields indicated on the maps occurred from the Trout Creek Diversion, as addressed under this change application. Statements by Ms. Henschell indicate irrigation of fields ceased after the 1996 season, and that “most, if not all, of the irrigation lines were sold in 1997”.

Table 4 shows approximate irrigated acreage at the WRN site from 1990 until 1996, at the time irrigation ceased. There was no information available for the years 1991 through 1993, and it was necessary to average 1990 and 1994 for an estimation of irrigated acres during this period.

Table 4. Annual Irrigated Areas (as defined by Cynthia Henschell in a February 8, 2008 e-mail) at WRN.

<i>Year</i>	<i>Acres Irrigated at the WRN</i>
1990	125.63
1991 – 1993 (average of 1990 and 1994)	101.5
1994	77.37
1995	75.35
1996	69.4

An estimate of previous irrigation quantities at the site would be in alignment with the amount allocated for future withdrawals at the site: a water duty of 1.5 afy/acre and 0.02 cfs/acre or 9 gpm/acre for instantaneous needs (see the *Future Irrigation Requirements* section).

The “fixed and determined” development plan (Portico Plan) protected water used at the WRN until 1991 from relinquishment. Therefore, the greatest amount of water used at the site between 1991 and 1996 was approximately 101.5 irrigated acres. Annual and instantaneous quantities more representative of previous use from the Trout Creek Diversion at the WRN site would be 152.25 afy and 913.5 gpm, respectively, with 85.05 percent allocated to Skamania County and 14.95 percent remaining with the USFS.

However, historical instantaneous and annual quantities utilized from the Trout Creek Diversion for the 160 acres at the WRN site were provided entirely by Certificate No.’s 764 and S2-00817. Therefore, Certificate No. S2-26536, subject of this change application, is considered relinquished as a matter of law for a period of non-use for five or more consecutive years under RCW 90.14.160.

Summary of Skamania County Water Right Allocations

Water required for the County’s fixed development plan (Figure 3-11) at the WRN site is 937 gpm and 76 afy (577 gpm and 9 afy for multiple domestic use, 7 afy for fire protection, 360 gpm and 60 afy for irrigation of 40 acres).

Total annual and instantaneous withdrawals will be approved in three of the four water rights conveyed to Skamania County in the 2002 USDA Conveyance Deed. Water rights will be approved for change (according to the priority date on the original certificate) to ensure the entire annual domestic quantity and an adequate portion of the instantaneous domestic quantity will be considered non-interruptible.

Quantities identified in the “fixed and determined” plan can be fully authorized for change under Certificate No.’s 764, G2-25679, and S2-00817. Certificate No. S2-26356 will be denied and subject to relinquishment for five consecutive years of non-use. Table 5 depicts allocation of non-interruptible portions of the certificates, and Table 6 depicts allocation of interruptible portions of the certificates.

Table 5. Non-Interruptible Water Right Allocations for Skamania County

Non-Interruptible	CERTIFICATE No.	APPORTIONED TO SKAMANIA COUNTY	ALLOCATED TO SKAMANIA COUNTY
	764 (March 15, 1923)	Qa 15.3 afy	Qa 4.5 afy (Domestic) 7 afy (Fire Protection)
		Qi 92 gpm	Qi 92 gpm (Domestic)
	G2-25679 (August 13, 1980)	Qa 16.63 afy	Qa 4.5 afy (Domestic)
		Qi 85.85 gpm	Qi 85.85 gpm (Domestic)

Table 6. Interruptible Water Right Allocations for Skamania County

Interruptible	CERTIFICATE No.	APPORTIONED TO SKAMANIA COUNTY	ALLOCATED TO SKAMANIA COUNTY
	S2-00817 (January 19, 1972)	Qa 129.5 afy	Qa 60 afy (Irrigation)
		Qi 776.9 gpm	Qi 360 gpm (Irrigation) 399.15 gpm (Domestic)
	S2-26356 (April 5, 1984)	RELINQUISHED	RELINQUISHED

The Conveyance Deed granted a majority of water rights previously held by the USFS to the County, but it does not appear the USFS had plans for remaining portions of the water rights. A statement in a Memorandum of

Understanding between the USFS and Skamania County (Agreement No. 01-MU-110603001-013) describes possible USFS plans to place remaining water rights into the Washington State Trust Water Rights Program (TWRP) (section 3, Part D).

A review of a proposed donation to the TWRP requires an evaluation of historical use of water under the water right for five years prior to donation in accordance with RCW 90.42.080(4). Any portion of water submitted to the TWRP, in addition to the portion of water retained by the applicant, cannot exceed the total amount of water used during the five years prior to the donation. Water use ceased near the end of 1996 on the WRN property with appurtenant water rights, and beneficial use of water has been discontinued for a period over five years prior to the review of this change application or any donation of remaining water rights. Ecology is not able to place any remaining portion of the above-referenced water rights in non-use into the TWRP.

Other Rights Appurtenant to the Place of Use

Table 7. Historic USFS Water Right Certificates Appurtenant to the WRN Site

<i>Certificate No.</i>	<i>Priority Date</i>	<i>WR Holder</i>	<i>Qi</i>	<i>Qa (afy)</i>
764	3/15/1923	Gifford Pinchot NF	2.0 cfs	Unidentified
766	5/26/1933	USFS	0.5 cfs	Unidentified
S2-00817	1/19/1972	USFS	8.25 cfs	418
R2-23196	9/26/1974	USFS	Reservoir	Reservoir
G2-25679	8/13/1980	USFS	200 gpm	66.5
S2-26536	4/5/1984	USFS	14.5 cfs	548
G2-26789	8/24/1985	USFS	3990 gpm	237

Consideration of Protests and Comments

In a letter dated August 17, 2004, David Hendengren submitted a protest to Applications for Change No.’s S2-00817, S2-00909, and S2-26536. The protest was a handwritten response to a presentation given by the County on August 16, 2004 about the effects of moving a surface water right to wells at the WRN site. The protest letter was signed by seven parties and submitted to Ecology on August 17, 2004.

The protest primarily focused on the fact that the County could not publicly guarantee corrective actions would be taken if the proposed withdrawal caused adverse effects to the wells in the surrounding area. According to the November 3, 2006 constant-rate test, these withdrawals are not expected to impair the protestants wells in the vicinity.

CONCLUSIONSIn accordance with RCW 90.08.380 and RCW 90.44.100, an evaluation of extent and validity for the change application filed on Certificate No. S2-26536 has been completed. Beneficial use of water under this certificate ceased for a period of five consecutive years, thus water, as approved under this certificate, has reverted to the State of Washington in accordance with RCW 90.14.160.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend this request for a change to Certificate No. S2-26536 for new points of withdrawal, place of use, and manner of use is denied.

Report by: _____

Abigail Brown

Water Resources Program

Date

If you need this publication in an alternate format, please call Water Resources Program at (360) 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

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ATTACHMENT 1: Water System Allocations for Domestic Use.

Environmental Protection Agency Allocations

<i>Domestic Use and Units</i>	<i>EPA Units/Year</i>	<i>EPA Unit</i>	<i>EPA Allowance/Unit (gallons)</i>	<i>TOTAL Water Use (Gallons/Year)</i>	<i>TOTAL Water Use (Acre-Feet/Year)</i>
Martha Creek Camp (cabin, resort)	10,260	Person	42.3	433,998	1.33
Wind River Inn (cabin, resort)	20,160	Person	42.3	852,768	2.61
Wind River Institute Housing (6 housing units)	2190	One 3-Bedroom House	360	788,400	2.41
Cascadia Learning Center (school, with cafeteria)	15,800	Student	15.9	251,220	.77
Cascade Festival Grounds (dining hall, meal)	2,100	Meal	7.9	16,590	.05
Wind River Fields – Skamania Farms (office)	235	Employee	14.5	3,408	.01
Hemlock Business Campus (office)	165	Employee	14.5	2,393	.007
TOTAL				2,348,777	7.2

Department of Health Allocations

<i>Domestic Use and Units</i>	<i>EPA Units/Year</i>	<i>DOH Unit</i>	<i>DOH Allowance/Unit (gallons)</i>	<i>TOTAL Water Use (Gallons/Year)</i>	<i>TOTAL Water Use (Acre-Feet/Year)</i>
Martha Creek Camp (cabin, resort)	10,260	Person	50	513,000	1.5
Wind River Inn (cabin, resort)	20,160	Person	50	1,008,000	3.09
Wind River Institute Housing (6 housing units)	2190	One 3-Bedroom House	360	788,400	2.4
Cascadia Learning Center (school, with cafeteria)	15,800	Student	20	316,000	.96
Cascade Festival Grounds (dining hall, meal)	2,100	Meal	10	21,000	.06
Wind River Fields – Skamania Farms (office)	235	Employee	15	3525	.01
Hemlock Business Campus (office)	165	Employee	15	2475	.007
TOTAL				2,652,400	8.13

ATTACHMENT 2: Proposed Building Size and Minimum Fire Flow Requirements (as adapted from Table 2, created by Kennedy/Jenks Consultants in a 2003 letter to Ecology).

Building		Area – Square Feet (Ea) ^(a)	Minimum Fire Flow per UFC (gpm) ^(b)	Minimum Fire Flow Duration per UFC (hr) ^(b)	Maximum Fire Flow per UFC (gpm) ^(b)	Maximum Fire Flow Duration per UFC (hr) ^(b)
Wind River Institute	New Station at Pacific Crest Field	1,000	1,500	2	1,500	2
Cascadia Learning Center	New Classroom at Pole Shed Drive	1,500	1,500	2	1,500	2
	Cabins at north edge of Martha Creek Field (5)	600	1,500	2	1,500	2
Martha Creek Camp	Cabins (5)	700	1,500	2	1,500	2
Inn at Wind River	Lodge w/ 60 rooms ^(c)	30,000	1,750	2	4,750	4
	New Cabins at Pole Shed Drive (5) ^(c)	600	1,500	2	1,500	2
Hemlock Business Campus	New Construction at Trout Creek Field	6,000	1,500	2	2,000	2
Equestrian Center	Multi-Use Facility ^(c)	600	1,500	2	1,500	2

Notes:

(a) = Data obtained from the Wind River Nursery Site and Facility Plant (The Portico Group, June 2000).

(b) = Data obtained from the 1997 Uniform Fire Code.

(c) = Building areas indicated are assumed.

Ea = Each.

UFC = Uniform Fire Code.

ATTACHMENT 3: Wells within or greater than a one-mile radius of the USFS Well.

<i>Water Right Name</i>	<i>Water Right Number</i>	<i>Location (TRS)</i>	<i>Approximate Distance from USFS Well</i>	<i>Well depth</i>	<i>Static Water Level</i>
USFS Well	G2-25679	T4N, R7E, Sec 26, SW, NE	0	230 feet	64 ft bTOC
USFS	G2-*04688	T4N, R7E, Sec 27, SW, NE	relinquished	198 feet	30 ft bTOC
Ray Bliss	G2-25335	T4N, R7E, Sec 26, NE, NW,	4,300 feet	110 feet	15 ft bTOC
Richard Durdle	G2-*11209	T4N, R7E, Sec 23, SW, SE	>5,400 feet	70 feet	8 ft bTOC
Cole Fargher	G2-26656	T4N, R7E, Sec 26, SW NE	>4,400 feet	306 feet	64 bTOC
Jim Garrison	G2-25693	T4N, R7E, Sec 26 NE, SW	4,400 feet	288 feet	73 ft bTOC
Carl Hedengren	G2-23060	T4N, R7E, Sect 26, SW, NW	2,000 feet	99 feet	39 ft bTOC
Lewis Johnson	011233	T4N, R7E, Sec 23 SW, SE	>5,400 feet	100 feet	19 ft bTOC
Byron Lee Kelson	G2-23602	T4N, R7E, Sect 26, NE NW	>3,700 feet	80 feet	?
Ray Larson	G2-20602	T4N, R7E, Sec 27, NE NE	>2,000 feet upgradient	112 feet	25 ft bTOC
Robert Oberst	G2-00081	T4N, R7E, Sect 26, SW SW	> 2,500 feet	88 feet	69 ft bTOC
Jack Shrum	G2-26745	T4N, R7E, Sect 26, SW NE	5,600 feet	308 feet	15 ft bTOC
Jack Shelton	G2-00732	T4N, R7E, Sec 23, SW, SE	>5,400 feet	205 feet	21 ft bTOC
Darrell Tillotson	G2-00547	T4N, R7E, Sect 26, NW SW	3,800 feet	97 feet	40 ft bTOC
C. Valkenburg	G2-24527	T4N, R7E, Sect 26, NE SW	3,800 feet	75 feet	No well log
Vernon (Mike) Warner	No Water Right	T4N, R7E, Sec 26 NW, NE	2,400 feet	316 feet	0 ft (artesian flow at 0.5 gpm)